



# HF COLOR VIDEO INTERCOM WITH RECORDING

*HFX-700R KIT*



OWNER'S MANUAL  
INSTALLATION AND OPERATION

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## IMPORTANT SAFETY INSTRUCTIONS

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE MONITOR OR POWER ADAPTER TO WATER OR MOISTURE.**

- ◆ Read Instructions -All the safety and operating instructions should be read before operating this equipment. These instructions should be retained for future reference.
- ◆ Heed Warnings - All warnings on the equipment and in the operating instructions should be adhered to. All instructions regarding care and operation of this equipment should be followed.
- ◆ Power Sources - Equipment should only be connected to the power supply specified in the operating instructions or as marked on the equipment.
- ◆ Power Cord Protection-Keep cable cords and plugs clear off other objects, particularly at the point where they exit the equipment.
- ◆ Cleaning - Clean the equipment by wiping with a soft cloth (do not use any abrasive agents or water).
- ◆ Non-use Periods - Power cords should be unplugged from the outlet when left unused for a long period of time.
- ◆ Object and Liquid Entry - Take care not to drop objects or liquids on any part of the equipment.
- ◆ Damage Requiring Service -The unit should be serviced by a qualified service personnel when:
  - The power supply cord or the plug has been damaged or
  - Objects have fallen, or liquid has been spilled onto the equipment or
  - The equipment has been exposed to rain or
  - The equipment does not appear to operate normally or exhibits a marked change in performance or
  - The equipment has been dropped and/or the enclosure has been damaged.
- ◆ Servicing - Do not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to as Qualified Distributor's Service Personnel.

## WARNING

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE MONITOR OR POWER ADAPTER TO WATER OR MOISTURE.

CAUTION: DO NOT OPEN. RISK OF ELECTRICAL SHOCK.

CAUTION! TO REDUCE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER OR BACK, NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

### OTHER WARNINGS

- ◆ Monitor is designed for indoor use only. Do not install outdoors.
- ◆ Keep the equipment dry. If water should get in, wipe off immediately. Water contains minerals that can erode electronic circuits.
- ◆ Intercom system is not operational during a power failure .
- ◆ Intercom system may be affected by radio frequency interference or EMI (electrical magnetic interference) in areas where broadcasting station antennas are close by.
- ◆ Keep all wiring at least 1 foot away from fluorescent lighting, dimmer switches and AC power.

### EXPLANATION OF TWO SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute risk of electrical shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## FCC CLASS B NOTICE

### NOTE:

This equipment has been Certified and found to comply with the limits regulated by FCC, and CE. Therefore, it is designed to provide reasonable protection against interference and will not cause interference with other appliance usage. However, it is imperative that the user follows this manual's guidelines to avoid improper usage which may result in damage to the unit, electrical shock, and fire hazard or injury. In order to improve the feature functions and quality of the product, the specifications are subject to change without notice from time to time.

### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to connect the interference by one or more of the following measures:

- Reorient or relocate the monitor unit
- Increase the separation between the monitor and camera
- Connect the equipment on a separate outlet
- Consult the dealer or an experienced radio or television technician

# HFX-700R KIT VIDEO INTERCOM SYSTEM

## 1. HFX-700R KIT introduction

Thank you for purchasing this Video Intercom System. This advanced system not only allows you to identify and communicate with visitors at the door and allows for remote door strike release, it can also record the video intercom communication on a micro SD card for later playback. This system has an interactive on screen menu for easy operation by touch sensitive buttons located on the two sides of the screen. Please read thru this manual for all detailed functions.

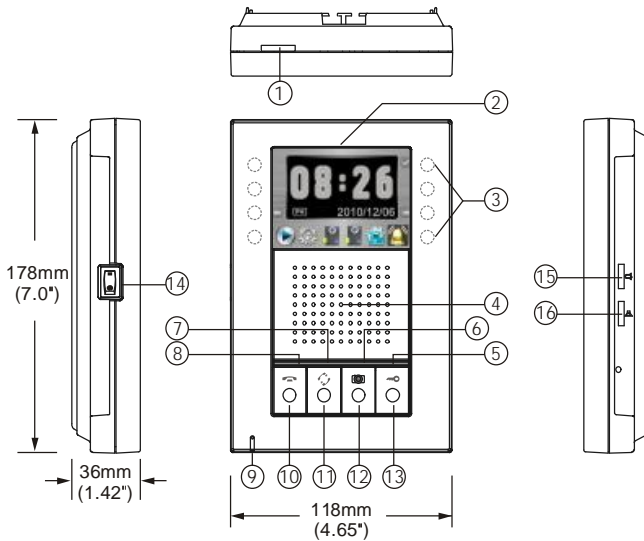
This package consists of a main monitor and a doorbell camera unit and a power supply.

This intercom system is capable of expanding up to a maximum of 4 indoor monitors and 2 doorbell cameras in a standard system. With additional EX-HUB home-run expansion modules, the total number of monitors can be extended up to 8 total.

For more information regarding the complete line of our products, please visit [www.comelitusa.com](http://www.comelitusa.com)

## 2.HFX-700R KIT Parts Identification

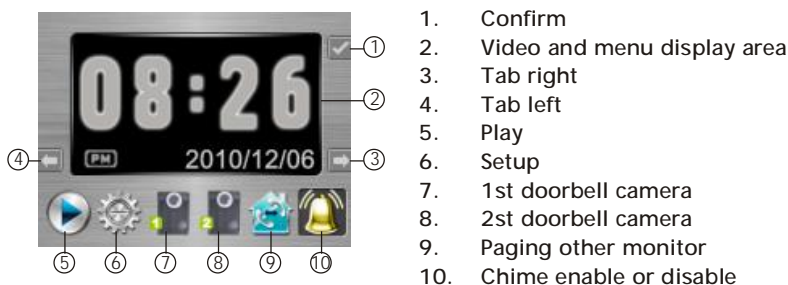
### 2.1. Main Monitor



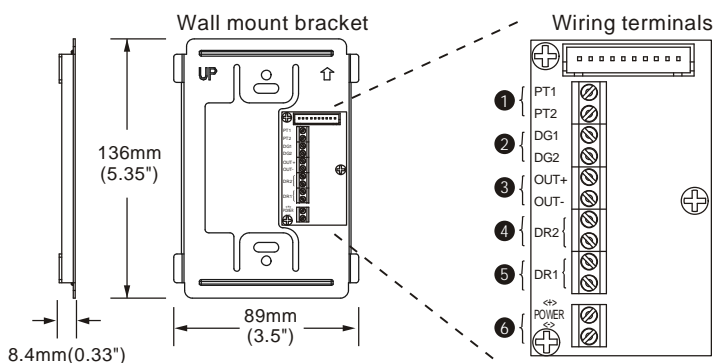
#### ◆ HFX-700R Main monitor identification:

1. Micro SD card slot socket
2. 3.5" Color TFT Screen
3. Touch sensitive buttons (4 on each side, unmarked)
4. Speaker
5. In use LED
6. Monitor LED
7. Intercom LED
8. Speech open LED
9. Microphone
10. Cut-off button(☞)
11. Intercom button(☎)
12. Monitoring button(📺)
13. Door release button(🔓)
14. Power switch
15. Bell Volume tuner(🔊)
16. Speaker Volume tuner(🔊)

◆ HFX-700R Main menu identification:

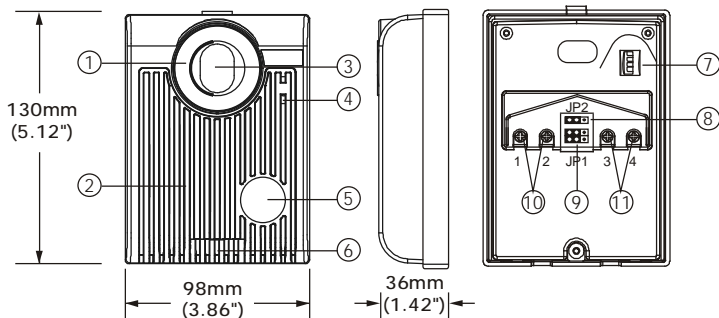


◆ Main monitor wall mount bracket





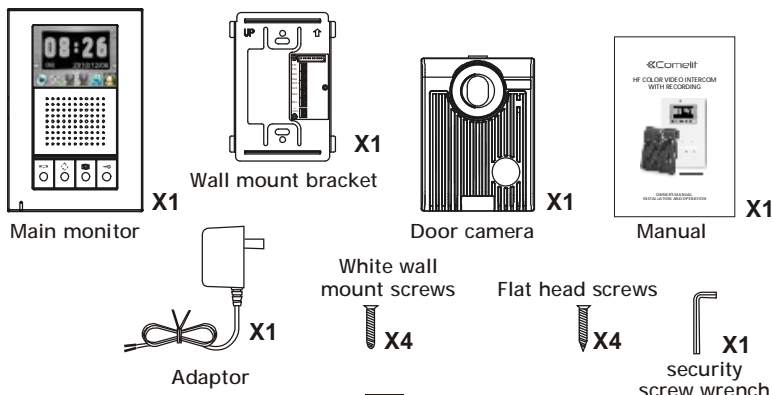
## 2.2. Door Camera



### ◆ HFX-700R Door Camera identification:

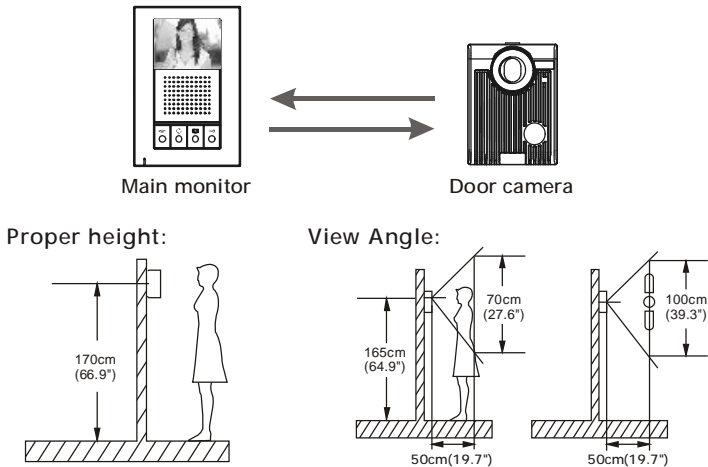
1. White LED Illumination
2. Speaker
3. 1/3" Color CCD
4. Microphone
5. Call button
6. Screw cover
7. CCD view angle knob  
(-6 degrees, 0 degrees, 8 degrees, 16 degrees)
8. Jumper 2 (enable/disable light sensor)
9. Jumper 1 (dry contact or current output selection)
10. Wire to door strike
11. Wire to main Monitor

## 2.3.HFX-700R KIT Packaging



### 3. HFX-700R KIT Installation

#### 3.1. Positioning the devices

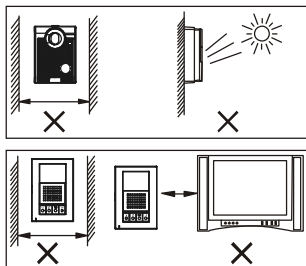


- ◆ The proper height of monitor or door camera is 160~170cm(63"-67") from the ground. This may vary on each installation. View range should be actively tested before complete.
- ◆ Viewing window of door camera is about 70cm up-n-down, and 100cm left-n-right.

#### NOTE 1: Wiring distance

- ◆ From main monitor to door camera: Maximum of 328 feet with AWG18 normal 2-wire parallel wires or CAT-5 cable.
- ◆ From monitor to monitor (every section): Maximum of 328 feet with AWG22normal 2-wire parallel wires or CAT-5 cable.

#### NOTE 2: the installation environment

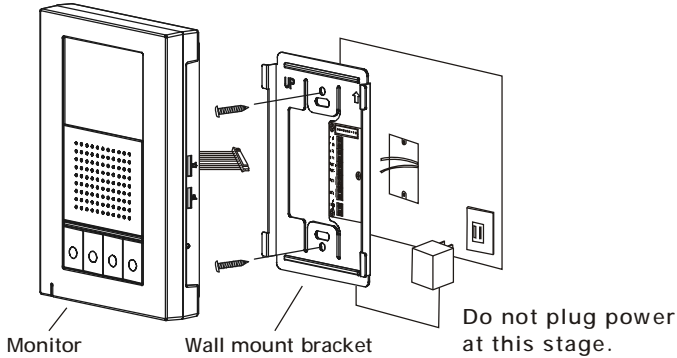


- ◆ Please avoid installation in an enclosed environment as this may cause feedback.
- ◆ Please avoid installation in direct sunlight as this can cause a blurry picture or dark shadows on subjects facing the camera.
- ◆ Please avoid wire installation near other power or signal lines and avoid placing units close to high power appliances as this may cause audio/video interference.

## 3.2. Installation

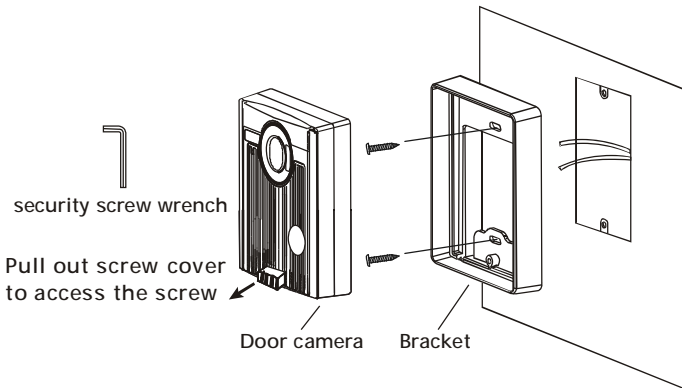
### STAGE 1: Installation of main monitor

- A. Fasten the wall mount bracket using the provided hardware.
- B. Fasten wires on terminals accordingly. (Refer to STAGE 3)
- C. Plug pin wires and mount the monitor unit on bracket.



### STAGE 2: Installation of the door cameras

- A. Use security screw wrench disassemble screw and remove door camera unit from bracket.
- B. Fasten wall mount bracket on position.
- C. Fasten wires on terminals and select jumpers for desired function. (refer to STAGE 3)
- D. Mount door camera unit on bracket, secure the assembly screw.



### STAGE 3: Wiring and settings

- A. Wire the system from door camera terminals to monitor terminals accordingly.
- B. Select and plug JP2 to its RIGHT(⏏) to disable LED illumination of the doorbell camera when it's activated. Factory setting is LEFT(⏏) which enables automatic LED illumination.
- C. Select and plug JP1 to its RIGHT(⏏) for direct current output control (12VDC 300mA) directly for a strike. Factory setting has JP1 to its LEFT (⏏) for dry contact bridge control.(Refer to 3.3 Door Release Options)
- D. External chime wiring diagram refer to figure 1.

- ① Terminals for magnetic switch (optional)
- ② Terminals for external chime (optional)
- ③ Terminals for expansion monitor (w/polarity)
- ④ Terminals for the 2nd door camera (no polarity)
- ⑤ Terminals for the 1st door camera (no polarity)
- ⑥ Terminals for power adapter
- ⑦ Terminals to main monitor (no polarity)
- ⑧ Terminals for door strike
- ⑨ Electric Lock

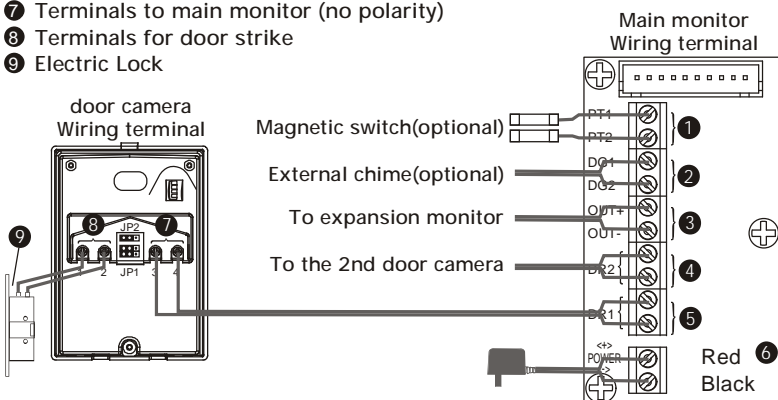
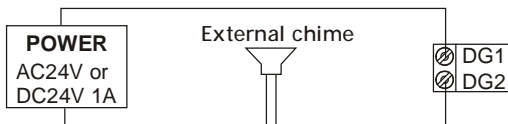


Figure 1: External chime wiring diagram (DC or AC power supply)

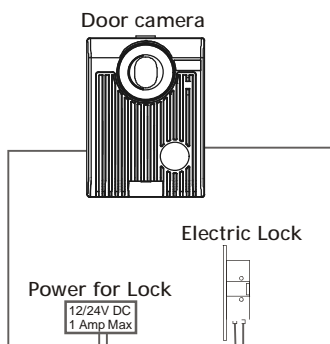


NOTE: External chime(DG1,DG2) provide as a normal open dry contact with no polarity, allowing maximum by-pass current of AC24V or DC24V 1A.

### 3.3. Door Release Options

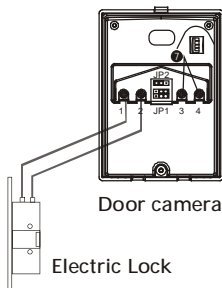
- ◆ Each Door Camera on the system is able to operate and release one electric lock. On a full system with 2 door cameras, the user is able to release up to two electric locks. The system can only release one electric lock at a time, depending on which door camera the call originated from. There are two door release wiring options that work with the Video Intercom System.
- ◆ The system can either provide a normally open dry contact (figure 1), or can be configured to give power (12V DC 300mA) straight to an electric lock that is within the power requirements (figure 2). If you are using power from the system (figure 2), It is necessary to use an electric lock that requires less than 300mA of power to engage the strike.

Figure 1: Door Release Option 1 (Additional power supply)



NOTE: When jumper setting is left (factory setting), the DOOR RELEASE terminals provide as a normal open dry contact with no polarity, allowing maximum by-pass current of AC24V or DC24V 1A.

Figure 2: Door Release Option 2 (Using power from the system)

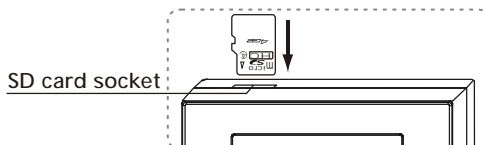


NOTE: When jumper setting is right, the DOOR RELEASE terminals provide current output of maximum 12VDC 300mA.

## 4. HFX-700R KIT read before operation

















### 4.1. Attention
















- A. Micro SD card, SDHC(High Capacity SD card), is not included in this product package.
- B. Insert SD card properly. The SD card can be 2GB to 16GB memory size.





- C. The video quality is 720x480 pixels, every recording (20 sec. a section) takes about 15M memory size. Every photo takes about 130KB memory size (So for a 4 GB card, it can hold about 260 Videos or 25,000 pictures).
- D. If SD memory is full, new recording will overlay the oldest section. Backup SD card memory is necessary.
- E. Power on the machine, you will see main menu display on screen, blue LED of the call button at doorbell camera on.
- F. Menu display will turn off after 90 seconds of standing by.
- G. There is a power reserve for 12 hours for clock adjustments. after 12 hours of the unit being powered off, the time settings will revert back to default settings and the user will have to set the time again.

### 4.2. On screen menu icons






ICON	FUNCTION
	Play
	Setup
	1st doorbell camera
	2nd doorbell camera
	Paging other monitor
	Chime
	Chime disable
	Set clock
	Door status-BELL
	Door status-LED
	Video recording mode
	photo recording mode
	Format SD card
	Escape to MAIN menu
	Tab right
	Tab left

ICON	FUNCTION
	Tab up
	Tab down
	Confirm
	Play
	Stop
	Pause
	Record
	Zoom in
	Zoom out
	Tilt view
	Video log
	Delete video
	Escape to MAIN menu
	Off
	SD card in place






### 4.3. Setup menu

- A. Move cursor to SETUP icon “” at main menu;
- B. Press “” can enter setup menu.

#### 4.3.1. Adjust clock

- A. At setup menu, “” and “” can move the cursor; “” and “” can alter parameter (figure 1);
- B. “” can save your new setup.

#### 4.3.2. Door open status indication

- A. There are PT1 and PT2 terminals on main monitor for connection of a magnetic switch to detect door open status.  
(magnetic switch is not included in the package)
- B. At setup menu, “” and “” can move the cursor to the mode you like; “” can save your setup (figure 2).
- C. If select “”, when door is opening, the main monitor will make a chime indication; If select “”, when door is opening, the LED of the main monitor's door release button will turn ON.





(figure 1)



(figure 2)

#### 4.3.3 Video or photo recording

- A. At setup menu, “←” and “→” can move the cursor to the mode you like; “✓” can save your setup.
- B. If select “”, enable automatic video recording mode, 20 seconds a section, when visitor calls from doorbell camera.
- C. If select “”, enable automatic photo recording mode, 3 shots per action, when visitor calls from doorbell camera.



(figure 1)



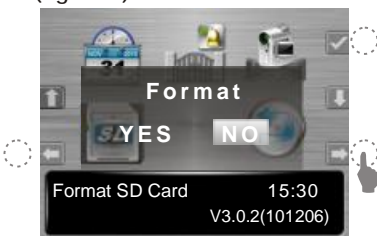
(figure 2)

#### 4.3.4. Format a new SD card

- A. At setup menu, “←” and “→” can move the cursor to SD card format option; “✓” to confirm (figure 1).
- B. Select “YES” to format your SD card, WARNING: Your previous memory saving on the SD card will be erased.
- C. Select “NO” to skip format execution.

#### 4.3.5. Exit setup menu

- A. At setup menu, move “←” and “→” to EXIT option; “✓” to select. (figure 2)



(figure 1)






(figure 2)






## 4.4. Intercom function operations

### 4.4.1. Push to talk function

- A. Speech open LED on means voice is free to go out from monitor to door camera.
- B. During conversation, press Monitor Button  for 2 seconds to switch to push to talk mode. Under this mode, press-on Monitor Button  and speaking out LED on allows push to talk to go out to door camera; let-go Monitor Button  and speaking out LED off allows unilateral voice to come in from door camera.
- C. This function can be useful when environment at door camera side becomes too noisy.

### 4.4.2. Visitor Calls from Door Camera

- A. Typical video intercom function, when call button is triggered, all monitors will chime and monitors will turn on.
- B. In 3 seconds time, the main monitor begins to record video of the door camera. In 20 seconds time if there is no answer from monitor, the system will time out. Visitor's video is recorded (figure 1).
- C. If tenant answers from main monitor (press monitor button ), video recording continues for 20 seconds, conversation time is limited to 90 seconds.
- D. If tenant answers visitor call from sub-monitor, main monitor will cut off, video recording will stop pre maturely.
- E. Press door release button  to control door strike; pressing the cutoff button  can end the intercom operation.

#### 4.4.3. zoom and pan/tilt function

- A. While talking to the doorbell camera from main monitor, tenant can at the same time operate the on-screen-menu to stop or resume video recording.
- B. To operate zoom and pan/tilt function has to stop recording first and resume afterward. (figure 1,2,3,4)



(figure 1:stop recording)



(figure 2 :resume recording)



(figure 3: zoom)




(figure 4: pan/tilt)

#### 4.4.4. Monitor doorbell cameras from main monitor

- A. From the main monitor, tenant can operate hard button to monitor doorbell cameras or operate on-screen-menu for interactive functions as video recording, zoom and tilt viewing angles (figure 1).
- B. Monitoring doorbell camera is limited for 90 seconds before automatic cutoff.

#### 4.4.5. All page announcement and intercom among monitors

- A. From any monitor, tenant can press intercom button  or select the function from the on-screen main monitor menu to page and make announcements to other monitors (figure 2).
- B. Paging and announcements can last for 30 seconds time, if any other monitor press the intercom button to respond, the two monitors can then engage in intercom conversation for maximum of 90 seconds.






(figure 1)




(figure 2)









### 4.5. Privacy function

- A. Move and select the BELL icon “” on the main menu.
- B. “” means privacy off (chime on); “” means privacy on and the chime is disabled.

### 4.6. Video/Photo playback menu

- A. Move and select PLAYBACK icon “” from main menu can play the latest video/photo recorded.(figure 1).

#### 4.6.1. Video or photo playback

- A. Select playback icon on main menu will firstly play the latest video/photo recorded.
- B. Video and photo are stored on the same file logs. Playback will show (  ) or (  ) on the up left corner.
- C. Select “” to search all video /photo by picture frames of the date.
- D. Select “” to search video FILES by date log(figure 2 and 3).
- E. Select “” to playback; “” to pause; “” to stop(figure 4 ).
- F. Select “” can return to main menu.



(figure 1)



(figure 2)





(figure 3)



(figure 4)

#### 4.6.2. Delete video/photo section(s)

- Select “” to enter delete sub menu. (figure 5).
- Move and select delete by SINGLE video section or ALL video sections.
- Reconfirm “YES” or “NO” for the action (figure 6).
- Select EXIT to move to PLAYBACK menu; Select “” to return to main menu.



(figure 5)



(figure 6)




## EXPANSION OPTIONS

- A. HFX-700R package consists of a main monitor, a door camera, and a power adaptor for the monitor.
- B. With HFX-700R basic system fully expanded, the system is capable of expanding up to a total of 4 indoor monitors and 2 doorbell cameras.



### ◆ System layout 1:

NOTE: the system is capable of expanding up to a total of 4 monitors (1 main video monitor + 3 expansion video monitor or 3 expansion audio monitor (video or audio mixing types) and 2 door cameras.

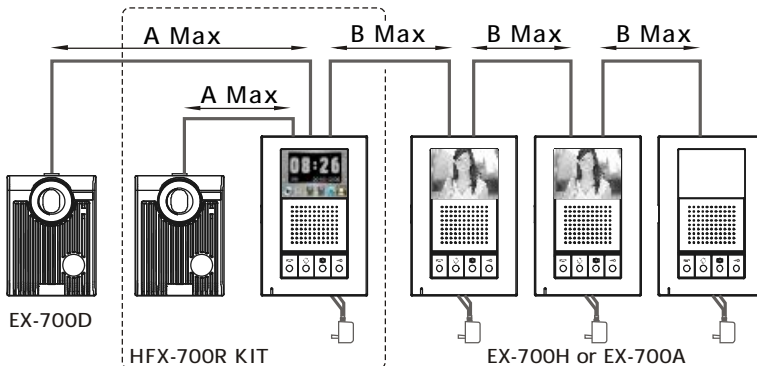
Maximum wiring distance  
(using dry contact lock control at doorbell camera)

Wire type	Wire assignment	A Max	B Max
CAT-5	 Signal wires	100m (328 feet)	100m (328 feet)
AWG#22 parallel wires	 Signal wires	100m (328 feet)	100m (328 feet)
AWG#18 parallel wires	 Signal wires	100m (328 feet)	100m (328 feet)

Maximum wiring distance  
(using the 12VDC/300mA lock control at doorbell camera)

Wire type	Wire assignment	A Max	B Max
AWG#22 parallel wires	 Signal wires	50m (164 feet)	50m (164 feet)
AWG#18 parallel wires	 Signal wires	100m (328 feet)	100m (328 feet)

NOTE : CAT-5 can NOT serve the purpose on this kind of installation condition.






◆ System layout 2:

NOTE 1: The wiring HUB can amplify and distribute the 2-wire signal among the main monitor and sub-monitors.

NOTE 2: the system is capable of expanding up to a total of 5 monitors with 1 EX-HUB or 8 total monitors with 2 EX-HUBs connected in one system.



**Maximum wiring distance**

(using dry contact lock control at doorbell camera)

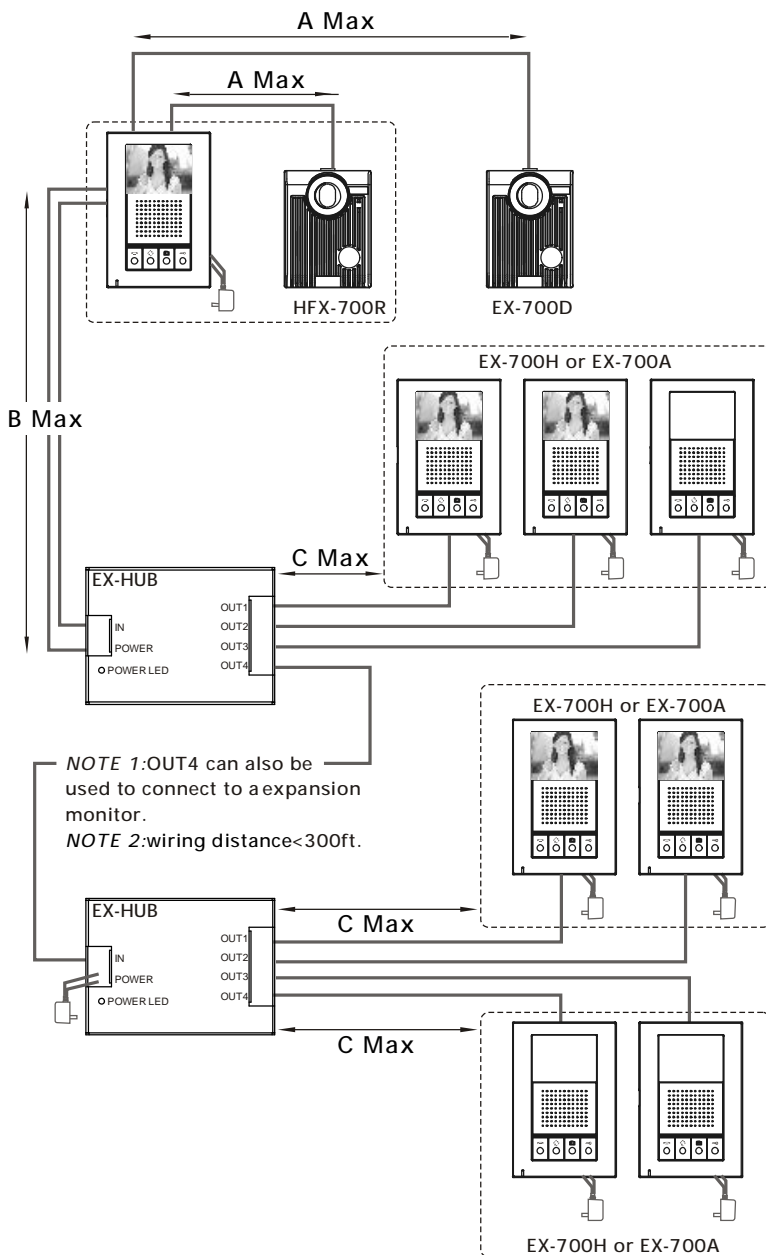
Wire type	Wire assignment	A Max	B Max	C Max
CAT-5	 Signal wires	100m (328 feet)	100m (328 feet)	100m (328 feet)
AWG#22 parallel wires	 Signal wires	100m (328 feet)	100m (328 feet)	100m (328 feet)
AWG#18 parallel wires	 Signal wires	100m (328 feet)	100m (328 feet)	100m (328 feet)

**Maximum wiring distance**

(using the 12VDC/300mA lock control at doorbell camera)

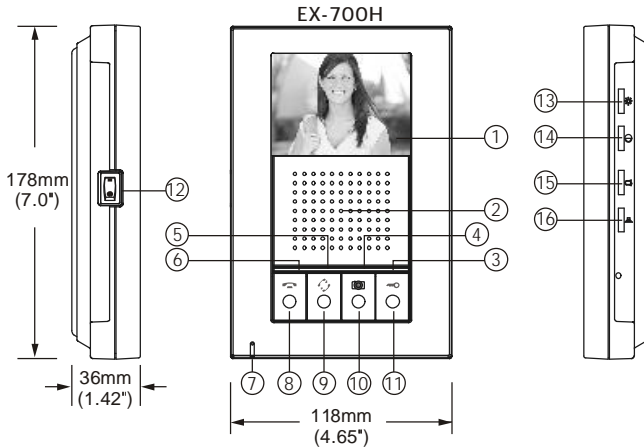
Wire type	Wire assignment	A Max	B Max	C Max
AWG#22 parallel wires	 Signal wires	50m (164 feet)	50m (164 feet)	100m (328 feet)
AWG#18 parallel wires	 Signal wires	100m (328 feet)	100m (328 feet)	100m (328 feet)

NOTE : CAT-5 can NOT serve the purpose on this kind of installation condition.



# 1. Expansion Video Monitor (EX-700H)

## 1.1. EX-700H Identification

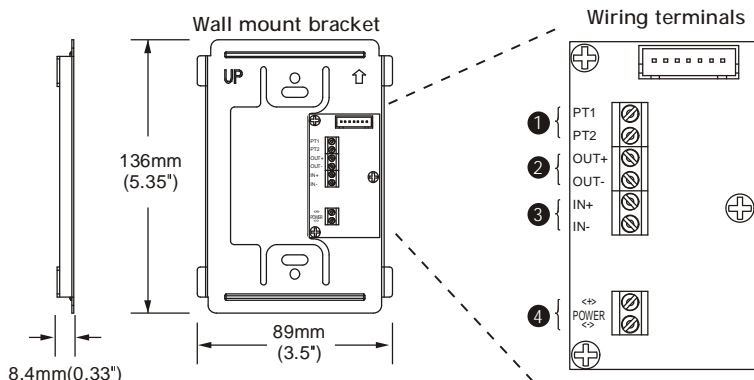


### ◆ EX-700H identification:

1. 3.5" Color TFT Screen
2. Speaker
3. In use LED
4. Monitor LED
5. Intercom LED
6. Speech open LED
7. Microphone
8. Cut-off button(↵)
9. Intercom button(☎)
10. Monitoring button(📺)
11. Door release button(🚪)
12. Power switch
13. Brightness tuner(⚙)
14. Sharpness tuner(⚙)
15. Bell Volume tuner(🔊)
16. Speaker Volume tuner(🔊)

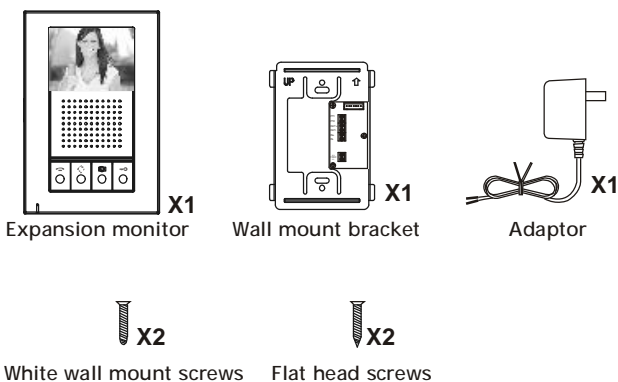


## ◆ EX-700H Wall mount bracket



- ① Magnetic switch sensor connection: for door status detection
- ② OUT: to next EX-700H monitor, w/polarity
- ③ IN: from HFX-700R or EX-700H monitor, w/polarity
- ④ Power adapter connection

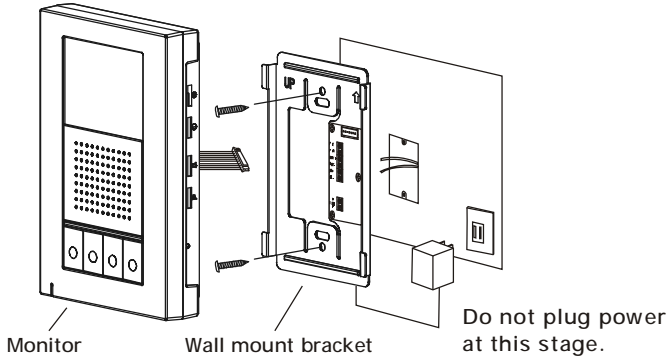
## ◆ EX-700H packaging



## 1.2. EX-700H Installation

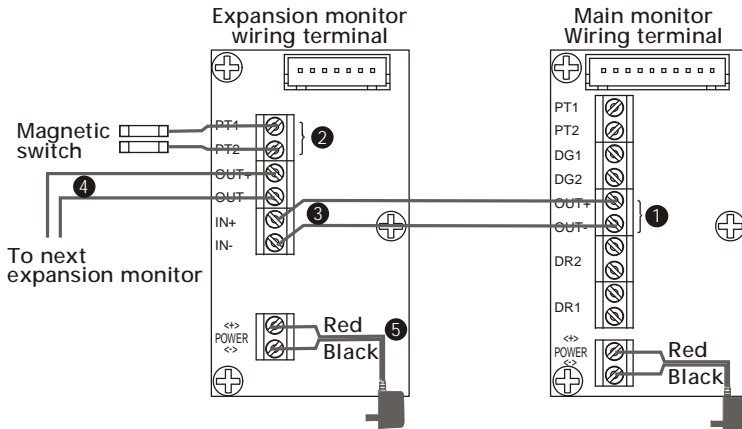
### STAGE 1: Installation of the expansion monitor

- A. Fasten the wall mount bracket using the provided hardware.
- B. Fasten wires on terminals accordingly. (Refer to STAGE 2)
- C. Plug pin wires and mount the monitor unit on bracket.



### STAGE 2: Wiring and settings




- A. Wire the system from terminals to terminals as accordingly.






- ① Terminals for expansion monitor (w/polarity)
- ② Terminals for magnetic switch (optional)
- ③ Terminals from previous monitor (w/polarity)
- ④ Terminals for next monitor (w/polarity)
- ⑤ Terminals for power adapter

## 1.3. EX-700H Operation




### 1.3.1. Visitor Calls from Door Camera

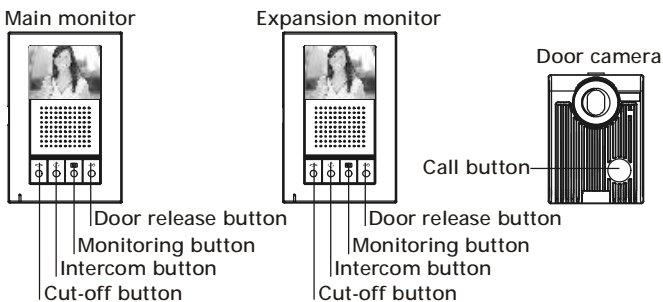
- A. When the Call button on the camera is pressed, All monitors on the system will ring with a chime sound and all monitors will be activated.
- B. After the call, if nothing on the monitor is pressed, the system will time out after 30 seconds. If the monitor button  is pressed, the system will stay active for 90 seconds.
- C. You are able to terminate the activity on the monitor at any time by pressing the Cut-off button .
- D. Press door release button  from monitor can release remote door strike at door camera.

### 1.3.2. Audio and Video monitoring

- A. Press the monitor button  can monitor audio and video from door camera.
- B. If there is a second door camera on this system, press Monitor button  again to scroll to the second expansion door camera.
- C. At anytime if you wish to terminate the monitoring, press the Cut-off button  to terminate the system.

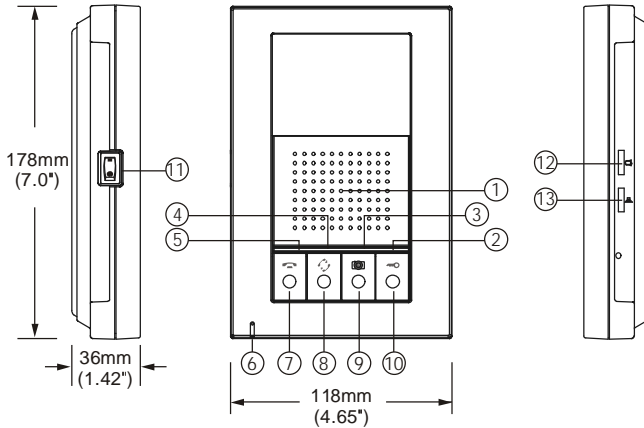
### 1.3.3. All-page and intercom function

- A. When system consists of main monitor and expansion monitor and an outdoor doorbell/camera unit, the system can provide intercom function.
- B. Press intercom button  from any monitor, all other monitors will react by making bell sound. At the same time, the host can speak and broadcast voice message to all other monitors.
- C. The broadcast mode can last for 20 seconds. During the 20 seconds, any other monitor can press the intercom button  to engage intercom conversation with the host for maximum of 90 seconds. This function provides audio intercommunication only, monitors show no picture.
- D. At anytime if you wish to terminate the monitoring, press the Cut-off button  to terminate the communication.



## 2. Expansion audio Monitor (EX-700A)

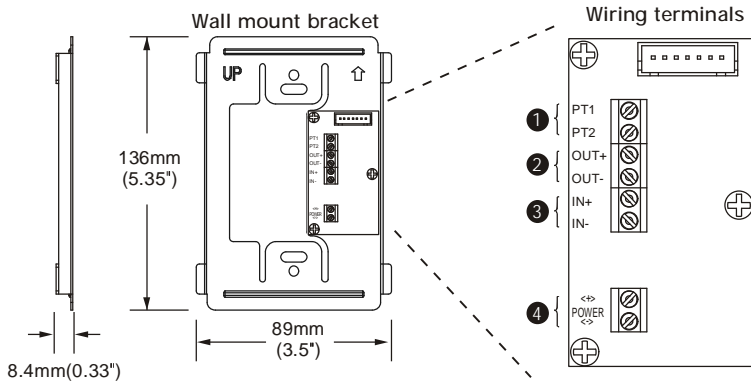
### 2.1. EX-700A Identification



#### ◆ EX-700A identification:

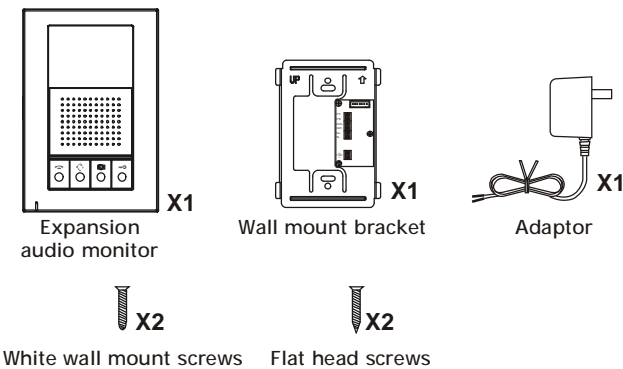
1. Speaker
2. In use LED
3. Monitor LED
4. Intercom LED
5. Speech open LED
6. Microphone
7. Cut-off button(↶)
8. Intercom button(↷)
9. Monitoring button(📺)
10. Door release button(↶)
11. Power switch
12. Bell Volume tuner(🔊)
13. Speaker Volume tuner(🔊)

## ◆ EX-700A Wall mount bracket



- ❶ Magnetic switch sensor connection: for door status detection
- ❷ OUT: to next EX-700A audio monitor, w/polarity
- ❸ IN: from HFX-700R or EX-700A monitor, w/polarity
- ❹ Power adapter connection

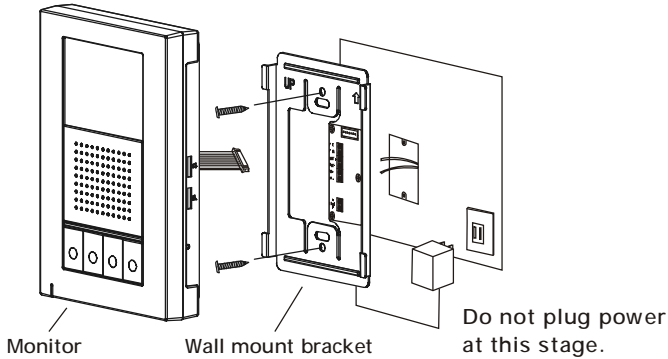
## ◆ EX-700A packaging



## 2.2. EX-700A Installation

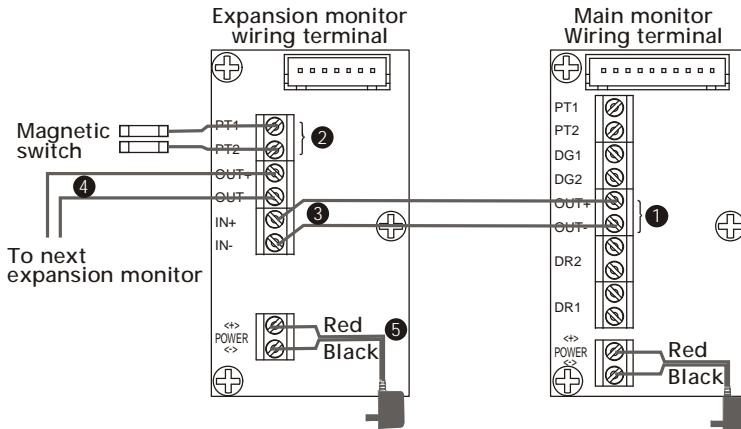
### STAGE 1: Installation of the expansion monitor

- A. Fasten the wall mount bracket using the provided hardware.
- B. Fasten wires on terminals accordingly. (Refer to STAGE 2)
- C. Plug pin wires and mount the monitor unit on bracket.



### STAGE 2: Wiring and settings

- A. Wire the system from terminals to terminals as accordingly.






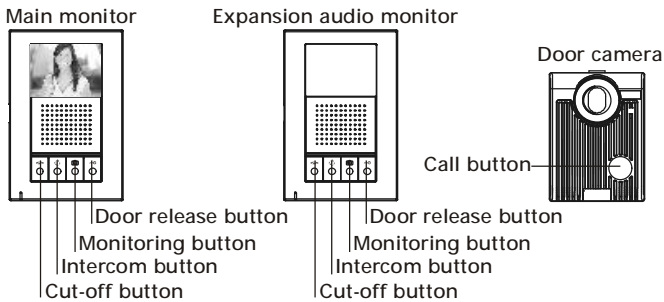
- ① Terminals for expansion monitor (w/polarity)
- ② Terminals for magnetic switch (optional)
- ③ Terminals from previous monitor (w/polarity)
- ④ Terminals for next monitor (w/polarity)
- ⑤ Terminals for power adapter

## 2.3. EX-700A Operation

- A. Operates the same as EX-700H (Refer to page 25).
- B. EX-700A audio only function, no video function.

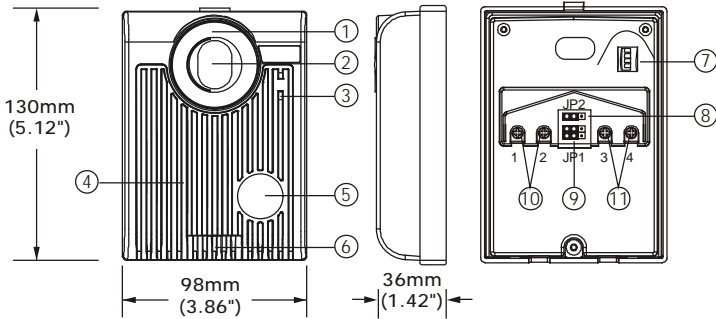
### 2.3.1. All-page and intercom function

- A. When system consists of main monitor and expansion audio monitor and an outdoor doorbell/camera unit, the system can provide intercom function.
- B. Press intercom button  from any monitor, all other monitors will react by making bell sound. At the same time, the host can speak and broadcast voice message to all other monitors.
- C. The broadcast mode can last for 20 seconds. During the 20 seconds, any other monitor can press the intercom button  to engage intercom conversation with the host for maximum of 90 seconds. This function provides audio intercommunication only, monitors show no picture.
- D. At anytime if you wish to terminate the monitoring, press the Cut-off button  to terminate the communication.



### 3. Door Camera (EX-700D)

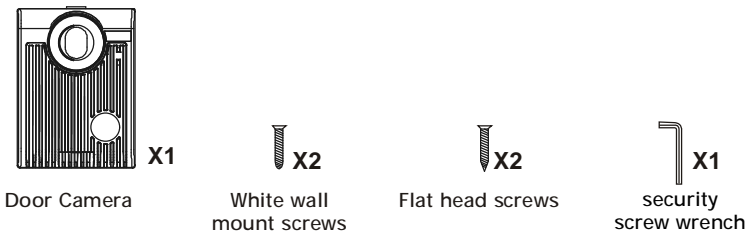
#### 3.1. EX-700D Identification



#### ◆ EX-700D identification:

1. White LED Illumination
2. 1/3" Color CCD
3. Microphone
4. Speaker
5. Call button
6. Screw cover
7. CCD view angle knob  
(-6 degrees, 0 degrees, 8 degrees, 16 degrees)
8. Jumper 2 (enable/disable light sensor)
9. Jumper 1 (dry contact or current output selection)
10. Wire to door strike
11. Wire to main Monitor

#### ◆ EX-700D packaging

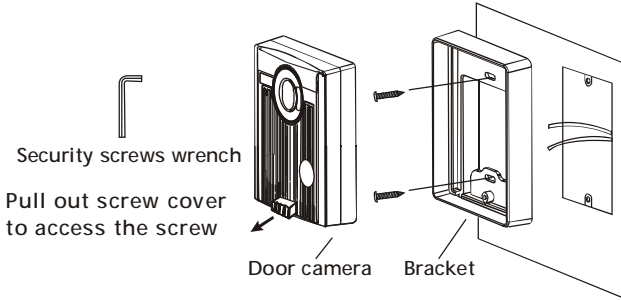




## 3.2. EX-700D Installation

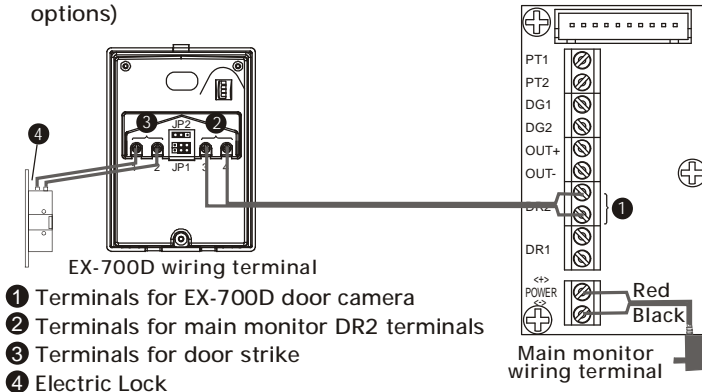
### STAGE 1: Installation of the door camera

- A. Use security screw wrench disassemble screw and remove door camera unit from bracket.
- B. Fasten wall mount bracket on position.
- C. Fasten wires on terminals and select jumpers for desired function.  
(refer to STAGE 2)
- D. Mount door camera unit on bracket, secure the assembly screw.



### STAGE 2: Wiring and settings

- A. Select and plug JP2 to its RIGHT (RIGHT) to disable LED illumination of the doorbell camera when it's activated. Factory setting is LEFT (LEFT) which enables automatic LED illumination.
- B. Select and plug JP1 to its RIGHT (RIGHT) for direct current output control (12VDC 300mA) directly for a strike. Factory setting has JP1 to its LEFT (LEFT) for dry contact bridge control. (Refer to page 11 door release options)



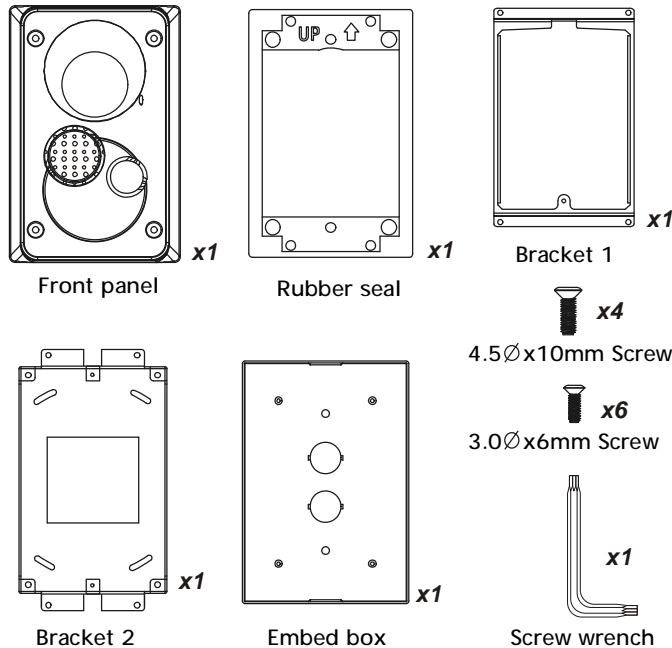
## 3.3. EX-700D Operation

- ◆ Operates the same as the 1st door camera unit (Refer to page 15).

4. Metal Door Camera Housing (EX-700V)

4.1. EX-700V contents

◆ EX-700V is an optional housing assembly kit to enclose EX-700D to become flush mount metal doorbell camera.



◆ Depends on different wall materials, please refer to the cut open size for EX-700V.

Measurements	Unit:mm	Unit:inch
Wooden wall (cut open size)	100x150x41	3.94"x5.91"x1.62"
Cement or brick wall (cut open size)	114x165x49	4.49"x6.50"x1.93"
Front panel (outlook)	120x180x7	4.72"x7.08"x0.28"

4.2. EX-700V Operation

◆ Doorbell function is unchanged as EX-700D (Refer to page 15).

## 4.3. Assembly Procedure

### STEP 1-1 :

- A. If on wooden wall, cut open space is 100x150x41mm.
- B. Embed box may not necessary. Go to Step 2.

### STEP 1-2 :

- A. If on cement or brick wall, cut open a hole size of 114x165x49mm.
- B. Make sure the stamp wire outlet on embed box been pried open.
- C. Insert and secure embed box inside the hole.

### STEP 2 :

- A. Install bracket 2 on top of the embed box.
- B. If without embed box, fasten bracket 2 directly on the wooden wall.

### STEP 3 :

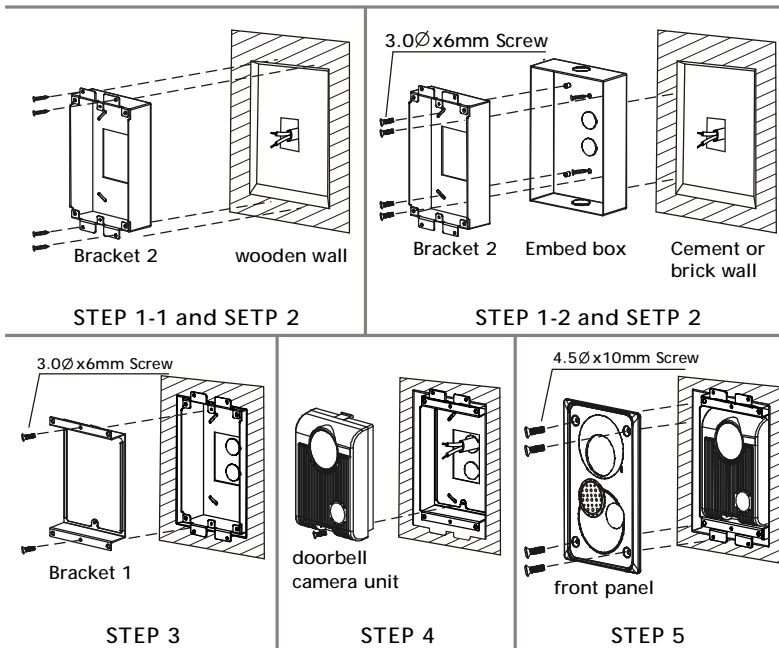
- A. Install bracket 1 on top of bracket 2.

### STEP 4 :

- A. Remove doorbell camera unit from its plastic wall mount bracket.
- B. Install the doorbell camera unit on top of bracket 1.

### STEP 5 :

- A. Place rubber seal and speaker mattress on position of the front panel.
- B. Fasten safety screws by using the attached wrench.



## TECHNICAL SPECIFICATIONS

### ◆ HFX-700R(main monitor)



Display:	3.5" digital TFT-LCD
Resolution:	320 x 240 pixels
Auto Timer (visitor call):	30 seconds time out; 90 seconds for conversation
Auto Timer (intercom):	30 seconds time out; 90 seconds for conversation
Operating Temperature:	14°F ~ 140°F, indoor
Dimensions (w/ bracket):	4.65"(L) x 7.0"(W) x 1.42"(D)
Power adaptor:	input 100~240VAC 50/60Hz; output 23VDC/1A(24W), external
Power consumption:	standby 3.5W, operating 11.0W (maximum)

### ◆ HFX-700R or EX-700D(door camera)

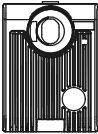
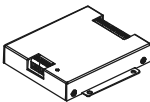


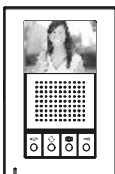
Image Sensor:	1/3" Sharp CCD
Resolution:	250,000 pixels (NTSC)
Camera Lens:	F/NO: 2.0 (120 degree)
View Angle:	-6°,0°,8°,16° manually adjustable
Auto Light Sensor:	enable/disable selectable (JP1)
Operating Temperature:	-13°F ~ 140°F, outdoor
Dimensions (w/ bracket):	3.86"(L) x 5.12"(W) x 1.42"(D)
Power consumption:	powered by main monitor
Remote Control: (dry contact bridge)	for maximum by pass current of 24V/1A
Remote Control:	maximum of DC12V/300mA (direct current output)

### ◆ EX-HUB (Home Run Configuration HUB)



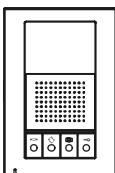
Power Input :	DC23V ~ DC24V
Power consumption :	Standby 1.8W; Operating 2W
Operating Temperature:	-4°F ~ 140°F
Storage temperature :	-13°F ~ 158°F
Weight :	0.5 lbs
Dimensions :	3.90"x3.19"x0.71"
Housing :	Metal

### ◆ EX-700H(optional expansion monitor)



Display:	3.5" digital TFT-LCD
Resolution:	320 x 240 pixels
Auto Timer (visitor call):	30 seconds time out; 90 seconds for conversation
Auto Timer (intercom):	30 seconds time out; 90 seconds for conversation
Operating Temperature:	14°F ~ 140°F, indoor
Dimensions (w/ bracket):	4.65"(L) x 7.0"(W) x 1.42"(D)
Power adaptor:	input 100~240VAC 50/60Hz; output 23VDC/1A(24W), external
Power consumption:	standby 1.4W, operating 3.0W (maximum)

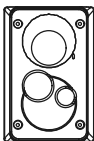
### ◆ EX-700A(optional expansion non-video monitor)



Auto Timer (visitor call):	30 seconds time out; 90 seconds for conversation
Auto Timer (intercom):	30 seconds time out; 90 seconds for conversation
Operating Temperature:	14°F ~ 140°F, indoor
Dimensions (w/ bracket):	4.65"(L) x 7.0"(W) x 1.42"(D)
Power adaptor:	input 100~240VAC 50/60Hz; output 23VDC/1A(24W), external
Power consumption:	standby 1.4W, operating 3.0W (maximum)

### ◆ EX-700V(Metal Door Camera Housing)

NOTE: EX-700V is an optional housing assembly kit to enclose EX-700D to become flush mount metal doorbell camera.



Wooden wall (cut open size) :	3.94"x5.91"x1.62"
Cement or brick wall (cut open size):	4.49"x6.50"x1.93"
Front panel (outlook):	4.72"x7.08"x0.28"
Housing :	Aluminum

## TROUBLE SHOOTING

Before requesting service, check the troubleshooting guide to solve the problem.

Problem	Solution
No power (no picture on monitor)	Make sure AC plug is firmly inserted into the AC outlet. Make sure the power terminal is firmly connected into the monitor unit. Check to ensure polarity is correct. (Red=positive, Black=negative).
System is on but no picture on the monitor	Make sure the cable is connected securely between the master monitor and the camera. Adjust the brightness and sharpness controls.
Sound is too low	Adjust the volume control.
Picture is too dark or too white	Adjust the brightness and sharpness controls.
Video recording NOT functioning	Check if SD card is in place and SD card icon appears on up left screen menu.

*NOTE: Be sure to use this product with the AC adapter supplied by the manufacturer.*

## SERVICE AND WARRANTY

To receive after sales service, please provide the following information when contact.

- Name of the product
- Model and serial number of the product
- The store's name where you purchased
- Date purchased
- Idea and area of possible problems

## Information Card

[illegible]

## The warranty statements

- a. This product is produced under strict internal quality control and inspection procedures.
- b. The warranty is good for one year from the date purchased. If the product reacts down under proper treatment during warranty, please contact our after sales connection for free-of-charge repairs.
- c. The following exceptional cases will be subject to charge, even during warranty period.
  - Breakdown caused by transport, or through careless treatment by customer.
  - Breakdown caused by unauthorized repair or modification.
  - Breakdown caused by natural disaster or electric power disorder.

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[Info@comelitusa.com](mailto:Info@comelitusa.com)